IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application of:	Docket No.: 702.124
CHILDS, MICHAEL, ET AL.	
Application No.: 10/086,370	Group Art Unit No.: 3663
Filed: February 28, 2002	
SYSTEMS, FUNCTIONAL DATA, AND METHODS TO PACK N-DIMENSIONAL DATA	Examiner: MANCHO, RONNIE M.

APPEAL BRIEF

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APPELLANTS' BRIEF ON APPEAL

In response to the final Office Action dated September 17, 2008, Appellants' Brief on Appeal in accordance with 37 C.F.R. § 41.37 is hereby submitted. The Examiner's final rejections of claims 1-3, 6-12, and 25-32 are herein appealed, and allowance of said claims is respectfully requested.

Appellants previously paid the Appeal Brief fee on August 24, 2005. As the Examiner reopened prosecution before Appellants' previous appeal was heard by the BPAI, no fee is due for this brief. However, should any fee be due, the Commissioner is hereby authorized to charge the amount of the filing fee for this Appeal Brief, or any additional fees which may be required, or credit any overpayment, to Account No. 501-791.

Respectfully submitted,

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Following are the requisite statements under 37 C.F.R. § 41.37:

I. Real Parties in Interest

Michael Childs and Darin Beesley are the inventors of the claimed inventions. Mr. Childs and Mr. Beesley assigned the present application to Garmin Ltd., the Real Party in Interest.

II. Related Proceedings, Appeals and Interferences

No related proceedings, appeals, or interferences are known to the Appellants that may directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

III. Status of Claims

Claims 1-3, 6-12, and 25-32 are pending, rejected, and herein appealed, with claims 1, 9, and 25 being independent and claims 4-5 and 13-24 being previously canceled.

IV. Status of Amendments

All amendments submitted by the Appellants have been entered. No amendments were filed subsequent to the Office action of September 17, 2008.

V. Summary of Claimed Subject Matter

The embodiment of claim 1 is generally directed at a navigation device that includes a processor (page. 11, line 1; 410 in FIG. 4A); a memory in communication with the processor (page 11, line 5; 430 in FIG. 4A); a display in communication with the processor (page 11, line 7; 440 in FIG. 4A); and compression and decompression instructions embedded on the processor (page 13, lines 17-24). The device uses the memory in cooperation with the processor and the compression and decompression instructions to compress a plurality of coordinate data into reduced sizes relative to original sizes of the coordinate data (page 16, line 22, through page 17, line 22) and associate at least a portion of activation data with each coordinate data (page 17, lines 23-25). Each coordinate data has three or more dimensions (page 17, lines 14-22) and each portion of the activation data identifies one of the three or more dimensions (page 17, line 23, through page 18, line 16; page 19, lines 11-18). At least a portion of the coordinate data is dynamically communicated to the display (page 12, lines 3-18).

The embodiment of independent claim 9 generally includes a mass storage device adapted to store navigation data (page 19, line 1; 512 in FIG. 5); a server adapted to communicate with the mass storage (page 19, line 1; 502 in FIG. 5); and compression and decompression instructions embedded on a processor of a navigation device (page 17, line 23, through page 18, line 16; page 19, lines 11-18; 516 in FIG. 5). The navigation device is adapted to communicate with and retrieve navigation data from the server via a communication channel (page 13, lines 6-16), wherein the navigation device includes a processor (page. 11, line 1; 410 in FIG. 4A) in communication with a memory (page 11, line 5; 430 in FIG. 4A), wherein the compression and decompression instructions of the processor and memory cooperate to compress at least three dimensional data into reduced sizes relative to original sizes associated with the at least three dimensional data (page 16, line 22, through page 17, line 22), and wherein the at least three dimensional data is associated with the navigation data and activation data (page 17, lines 23-25), and wherein each one of the at least three dimensional data is associated with a portion of the activation data (page 17, line 23, through page 18, line 16; page 19, lines 11-18).

Independent claim 25 recites compression and decompression instructions embedded in a processor (page. 11, line 1; 410 in FIG. 4A), in communication with a

memory (page 11, line 5; 430 in FIG. 4A) and a display (page 11, line 7; 440 in FIG. 4A), and a GPS receiver (page 11, lines 1-5; 450 in FIG. 4A). The processor is adapted for cooperating with the memory using the compression and decompression instructions to compress navigation data having three or more dimensions (page 17, line 23, through page 18, line 16; page 19, lines 11-18) wherein the navigation data includes activation data and coordinate data (page 17, lines 23-25), wherein the activation data includes a plurality of portions and each portion of the activation data maps to one of the three or more dimensions (page 17, line 23, through page 18, line 16; page 19, lines 11-18). The GPS receiver cooperates with the processor and provides to the processor specific values for coordinate data (page 21, lines 9-13), wherein the processor maps the specific values with portions of the compressed navigation data using the activation data and dynamically decompresses those mapped portions and communicates the decompressed mapped portions to the display (page 12, lines 3-18; page 17, line 23, through page 18, line 9).

Appellants note that the page and line numbers cited above are for reference purposes only and should not be taken as a limitation on the support for, or scope of, the claimed subject matter. Support for the claimed subject matter may be found throughout the specification and drawings and the page and line numbers cited above merely refer to exemplary portions of the specification.

VI. Grounds of Rejection to be Reviewed on Appeal

A. Whether claims 25-32 were properly rejected under 35 U.S.C. § 112, ¶ 1, for failing to comply with the written description requirement.

B. Whether claims 25-32 were properly rejected under 35 U.S.C. § 112, ¶ 1, for failing to comply with the enablement requirement.

C. Whether claims 1, 2, 6, 7, 8, and 25-32 were properly rejected under 35 U.S.C. § 102(e) for being anticipated by Friederich (U.S. Patent No. 6,600,841).

D. Whether claim 3 was properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Friederich and Robinson (U.S. Patent No. 5,995,970).

E. Whether claims 9-12 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Friederich in view of Ito (U.S. Patent No. 6,484,093).

VII. Argument

The present Appeal Brief is the ***third*** brief filed by Appellants for the above-referenced application. The present Appeal Brief addresses substantially the same issues as the first two appeal briefs—e.g., whether Friederich teaches various features recited in the independent claims. After filing of each of the previous appeal briefs, prosecution was reopened by the Technology Center before any decision by the Board of Patent Appeals and Interferences (BPAI).[1] This Brief—in a similar manner to the previous two briefs—yet again sets forth why the Examiner's rejections are improper.

A. Whether claims 25-32 were properly rejected under 35 U.S.C. § 112, ¶ 1, for failing to comply with the written description requirement.

1. The applicable law under § 112

To satisfy the written description requirement, the specification must describe the claimed invention in sufficient detail that one skilled in the art can reasonably conclude that the inventor had possession of the claimed invention. *Moba, B.V. v. Diamond Automation, Inc.*, 325 F.3d 1306, 1319, 66 USPQ2d 1429, 1438 (Fed. Cir. 2003).

There is a strong presumption that an adequate written description of the claimed invention is present when the application is filed. *In re Wertheim*, 541 F.2d 257, 263, 191 USPQ 90, 97 (CCPA 1976). A specification that describes all aspects of the claimed invention with sufficient particularity, such that one skilled in the art would recognize that the applicant had possession of the claimed invention, satisfies the written description requirement. *See* MPEP § 2163(I)(A).

The examiner has the initial burden, after a thorough reading and evaluation of the content of the application, of presenting evidence or reasons why a person skilled in the art would not recognize that the written description of the invention provides support for the claims. *See* MPEP § 2163. In rejecting a claim for lack of written description, the examiner must set forth express findings of facts that support his or her conclusion. *See* MPEP § 2163(III)(A).

[1] See, e.g., the December 12, 2005, non-final Office Action and the December 31, 2007 non-final Office Action.

2. The Examiner's rejections

In the September 17, 2008, Office Action, claims 25-32 were rejected under § 112, ¶ 1, for failing to comply with the written description requirement due to the recitation of "the activation data includes a plurality of portions" in claim 25. Specifically, the Examiner contends that the originally-filed specification does not disclose this feature.

Appellant respectfully submits that the originally-filed specification is replete with discussions of the activation data and how portions of the activation data may map to various dimensions of the coordinate data. As one example, the "portions" of activation data may correspond to each bit of a four bit string:

> The activation data 650 is parsed, such that each coordinate data 640 is identified with activated dimension data 660, thus resolving which dimensions 660 are in use. For example, coordinate data 640 associated with marine cartographic data can include one or more coordinate data 640. According to this example, each coordinate data 640 has four dimensions 660, namely longitude position, latitude position, bottom conditions, and water depth. The activation data 650 is a four bit string, wherein each bit is set to "1" with the location of each bit uniquely identifying one of the four dimensions 660. In this way, when the coordinate data 640 is packed or compressed in the memory 620, or unpacked or decompressed from the memory 620, the activation data 650 assists in only packing or unpacking dimensions 660 being used by device 600. Further, other configurations using the activation data 650 can be used to achieve the same result, all such other configurations are intended to fall within the broad scope of the present invention.

<u>Specification (pgs. 17-18)</u>

As such, Appellant submits that claims 25-32 were not properly rejected under § 112 as the portions of activation data recited in claim 25 are clearly disclosed and supported by the originally-filed specification.

B. Whether claims 25-32 were properly rejected under 35 U.S.C. § 112, ¶ 1, for failing to comply with the enablement requirement.

1. The applicable law under § 112

35 U.S.C. § 112, first paragraph, requires that the specification describe how to make and use the claimed invention. Detailed procedures for making and using the invention may not be necessary if the description of the invention itself is sufficient to permit those skilled in the art to make and use the invention. MPEP § 2164; see also *CFMT, Inc. v. Yieldup Int'l Corp.*, 349 F.3d 1333, 1338, 68 USPQ2d 1940, 1944 (Fed. Cir. 2003). A patent need not teach, and preferably omits, what is well known in the art. *In re Buchner*, 929 F.2d 660, 661, 18 USPQ2d 1331, 1332 (Fed. Cir. 1991).

A claimed invention is enabled when one reasonably skilled in the art could make or use the invention from the applications' disclosure—and information known in the art— without undue experimentation. *United States v. Telectronics, Inc.*, 857 F.2d 778, 785, 8 USPQ2d 1217, 1223 (Fed. Cir. 1988).

The factors for determining whether or not the practice of a claimed invention requires undue experimentation, include but are not limited to: the breadth of the claims; the nature of the invention; the state of the prior art; the level of one of ordinary skill; the level of predictability in the art; the amount of direction provided by the inventor; the existence of working examples; and the quantity of experimentation needed to make or use the invention based on the content of the disclosure. *In re Wands,* 858 F.2d 731, 737, 8 USPQ2d 1400, 1404 (Fed. Cir. 1988).

A conclusion of lack of enablement means that, based on the evidence regarding each of the above factors, the specification, at the time the application was filed, would not have taught one skilled in the art how to make and/or use the full scope of the claimed invention without undue experimentation. *In re Wright*, 999 F.2d 1557,1562, 27 USPQ2d 1510, 1513 (Fed. Cir. 1993). The determination that "undue experimentation" would have been needed to make and use the claimed invention is not a single, simple factual determination; it is a conclusion reached by weighing all the above noted factual considerations. *In re Wands,* 858 F.2d at 737.

2. The Examiner's rejections

In the September 17, 2008, Office Action, claims 25-32 were rejected under § 112, ¶ 2, for failing to comply with the enablement requirement due to claim 25's recitation of "wherein the processor maps the specific values with portions of the compressed navigation data using the activation data and dynamically decompresses those mapped portions and communicates the decompressed mapped portions to the display."

Examples of how to implement this functionality are provided throughout the specification:

> communication with the processor 410. The memory 430 includes cartographic data having control data and one or more coordinate data. A display 440 is in communication with the processor 410, and the processor 410 is capable of packing and unpacking the cartographic data and generating a route within the cartographic data. The electronic navigational aid device processes device's travel along a generated route using a set of processing algorithms and cartographic data stored in memory 430 to operate on signals (e.g., GPS signals, received from the antenna/receiver 450 or any wireless signals), as the same will be known and understood by one of ordinary skill in the art upon reading this disclosure. The coordinate data is unpacked using the control data and mapped to a location on the route.

Specification, pg. 12

> The activation data 650 is parsed, such that each coordinate data 640 is identified with activated dimension data 660, thus resolving which dimensions 660 are in use. For example, coordinate data 640 associated with marine cartographic data can include one or more coordinate data 640. According to this example, each coordinate data 640 has four dimensions 660, namely longitude position, latitude

position, bottom conditions, and water depth. The activation data 650 is a four bit string, wherein each bit is set to "1" with the location of each bit uniquely identifying one of the four dimensions 660. In this way, when the coordinate data 640 is packed or compressed in the memory 620, or unpacked or decompressed from the memory 620, the activation data 650 assists in only packing or unpacking dimensions 660 being used by device 600. Further, other configurations using the activation data 650 can be used to achieve the same result, all such other configurations are intended to fall within the broad scope of the present invention.

As one skilled in the art will appreciate, the device 600 of Figure 6 optimizes the use of storage within the device 600 and permit the packing and the unpacking of n-dimensional data 660 associated with coordinate data 640. Accordingly, a single cartographic data in some embodiments is customized using various configurations of activation data 650 to derive appropriate packed/unpacked coordinate data 640. Furthermore, in other embodiments the processor 630 and the memory 620 cooperate to communicate with an interface device 612 which audibly or visually interfaces with the display 610 of the device 600.

<u>Specification (pgs. 17-18)</u>

As such, Appellants submit that claim 25 is fully enabled by the specification and that the Examiner has not meet his burden in establishing a lack of enablement under the analysis required by *In re Wands* and other binding precedent.

C. Whether claims 1, 2, 6, 7, 8, and 25-32 were properly rejected under 35 U.S.C. § 102(e) for being anticipated by Friederich (U.S. Patent No. 6,600,841)

As is discussed at length below, the Examiner has failed to establish a *prima facie* case of anticipation as Friederich does not teach compressing coordinate data using activation data as is recited in all independent claims. Instead, Friederich indiscriminately compresses all data within a parcel and not according to dimensions identified by activation data.

1. The Examiner's burden in establishing a *prima facie* case of anticipation

"[T]he examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a prima facie case of unpatentability." *In re Oetiker*, 977 F.2d 1443, 1445 (Fed. Cir. 1992), see also *Ex parte POD-NERS, L.L.C.*, Appeal 2007-3938 (BPAI April 29, 2008). "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631 (Fed. Cir. 1987). The identical invention must be shown in as complete detail as is contained in the claim. MPEP § 2131.

3. Independent Claim 1

Appellants' specification discloses that it is known in the art to pack (compress) two-dimensional coordinate data, such as coordinate data corresponding to latitude and longitude (page 2, lines 19-23)[2]. In contrast, the claimed invention recites packing (compressing) three-dimensional coordinate data using ***activation data*** that identifies dimensions for each coordinate, thereby further reducing the size of coordinate data used by various navigation and computing devices (page 27, lines 1-9).

As should be appreciated, the coordinate data for an entire region, such as the state of New York, would include information corresponding to thousands of roads,

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[2] See U.S. Patent No. 5,995,970, incorporated by reference on page 17 of the specification.

buildings, waterways, airports, etc—potentially occupying a large amount of memory. The present invention seeks to compress (pack) this N-dimensional coordinate data to reduce the amount of memory it occupies. Portions of the activation data are associated with the coordinate data to identify the various dimensions of the coordinate data.

The activation data is used to identify which dimensions are in use, and thus which dimensions should be compressed or decompressed (page 17, line 23, through page 18, line 9). Such a configuration advantageously allows embodiments of the present invention to conserve processor and memory resources by compressing and decompressing only the coordinate data dimensions that are currently being used by the device.

The Examiner points to the teachings of Friederich to show the compression of N-dimensional coordinate data as recited in claim 1. The Examiner appears to equate Friederich's parcellation process—i.e., how data parcels are defined—with the compression functionality recited in claim 1 (September 17, 2008, Office Action, pgs. 5-6). However, parcellation is *not* the same thing as compression and, as discussed below at length, Friederich's compression process is unrelated to the functionality recited in claim 1.

Friederich discloses the use of 3-dimensional coordinate data including latitude, longitude, and altitude (col. 7, ll. 50-55). Friederich also generally discloses compressing geographic data, including the compression of parcels including 3-dimensional coordinate data (col. 20, ll. 22-40). Specifically, Friederich teaches dividing data into parcels and then compressing each parcel (col. 34, ll. 26-27). However, in contrast to the claimed invention, <u>Friederich does not use activation data to facilitate compression and decompression of parcels or other data.</u>

Friederich's parcels are organized such that the navigation device retrieves relevant parcels based on its current geographic location (col. 12, ll. 45-55). Each parcel is sized to correspond to the quantity of data that can be accessed in a single disk access, such as a 16 kB parcel corresponding to a CD (col. 12, ll. 55-61). The small size of the parcels enables all data associated with the parcel to be read at the same time:

> As shown in FIG. **6**, parcels **220** of data are stored to form the database **40** so that the data in each parcel **220** are logically and/or physically grouped together. When a parcel of data is accessed, all of its data records are read from the medium into the memory of the navigation system at the same time. Prior to forming the data into parcels, the data are

Friederich (col. 12, ll. 62-67) (annotated)

For compression and decompression, all data within each parcel (regardless of how many dimensions each parcel represents) is compressed or decompressed on the fly (col. 32, l. 66, through col. 33, l. 18). Friederich's geographic data is compressed in a manner that maintains the original organization of the parcels (col. 18, ll. 25-28) and the parcels' small size:

> disclosed above. Different kinds of parcelization processes can be used. As the data are formed into parcels, the resultant size of the data that forms each parcel is checked. After the data which have been designated for a parcel have been compressed, the amount of storage required for the data should not exceed the maximum parcel size. For example, if the parcels are formed so that the size of each parcel does not exceed 16 K, then after the geographic data are compressed, the resultant size of the data designated as corresponding to the parcel is checked to confirm that the size, after compression, does not exceed the 16 K limit. To the extent

Friederich (col. 32, ll. 1-11)

To compress each parcel, Friederich employs generally conventional LZ-type substitution compression, where repeated text strings within each parcel are replaced with a shorter substitution string (col. 17, ll. 50-65). The use of LZ-type substitution compression and corresponding Huffman codes dictates that the entire parcel be compressed and decompressed:

> To decode a parcel, a bit pointer is pointed to the top of the parcel. The initial code in the parcel will be a Huffman code. In a present embodiment, a parcel will not start with a substitution code, and therefore the initial Huffman code, when decoded, will include a run length count that indicates how many of the Huffman codes following this initial code are Huffman codes for literals which are to be decoded using the first Huffman tree. Because the run length counts for literals are encoded, along with the LZ/literal bit flag, in the third Huffman tree, the initial Huffman code is decoded using the third Huffman tree. Note that this initial Huffman code in a parcel, when decoded using the third Huffman tree, will include a LZ/literal flag (set to indicate that the data following this bit is a run length count for literals) followed by the run length count. Although it can be assumed that a parcel does not start with a substitution code and therefore the LZ/literal flag in the initial code is redundant and unnecessary, using the same Huffman tree for this initial run length count provides overall efficiency.

Friederich (col. 33, ll. 31-49)

> This process is continued until the entire parcel is decompressed.

Friederich (col. 34, ll. 26-27) (annotated)

Thus, even assuming *arguendo* that Friederich's parcels contain 3-dimensional coordinate data, Friedrich cannot anticipate claim 1 because:

- Friederich does not teach the use of activation data to compress only a selected dimension of coordinate data—instead Friederich employs a parcellation process to selectively store and compress coordinate data;
- Friederich teaches using LZ-type substitution compression algorithms to compress *all* data within a parcel as opposed to dimensions specified by activation data;
- Friederich provides no teachings reading compression/decompression of only a selected dimension of a parcel—instead Friederich provides efficiency by minimizing parcel size and decompressing entire parcels; and

- The record is silent regarding how Friederich's LZ-type substitution compression algorithms could be used to selectively compress three-dimensional coordinate data using activation data.

Consequently, Friederich does not disclose or suggest the compression or decompression of N-dimensional coordinate data using activation data. In contrast to Friederich, embodiments of the present invention are not required to parcel coordinate data into small amounts, as activation data is used to ensure that only relevant coordinate data dimensions are compressed or decompressed.

Thus, Friederich does not anticipate claim 1 or the claims that depend therefrom.

4 Independent Claim 25

Independent claim 25 recites using compression and decompression instructions as discussed above regarding independent claim 1. As such, Friederich does not anticipate claim 25 or the claims that depend therefrom.

D. Whether claim 3 was properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Friederich and Robinson (U.S. Patent No. 5,995,970).

Claim 3 depends from independent claim 1, which is discussed above at length. Appellants respectfully submit that claim 3 is allowable for the same reasons discussed above regarding independent claim 1.

E. Whether claims 9-12 were properly rejected under 35 U.S.C. § 103(a) as being unpatentable over Friederich in view of Ito (U.S. Patent No. 6,484,093).

1. The Examiner's burden in establishing a prima facie case of obviousness.

The law places upon the Examiner the initial burden of establishing a prima facie case of obviousness. MPEP § 2143.03 similarly requires the "consideration" of every claim feature in an obviousness determination. If the Examiner fails to establish the requisite prima facie case, the rejection is improper and will be overturned. *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955 (Fed. Cir. 1993). Only if the Examiner's burden is met does the burden shift to the Applicant to provide evidence to refute the rejection. Id.

When determining whether a claim is obvious, an examiner must make a searching comparison of the claimed invention – including all its limitations – with the teaching of the prior art. *In re Wada and Murphy*, Appeal 2007-3733 (BPAI January 14, 2008), citing *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995). Thus, obviousness requires a suggestion of all limitations in a claim. Id. An Examiner cannot establish that a claim is obvious "merely by demonstrating that each of its elements was, independently, known in the prior art." *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741 (2007). Rather, there must be some reason to combine the known elements in the claimed fashion. *Id.* Thus, an obviousness rejection cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness. *In re Kahn*, 441 F.3d 977, 988, 78 U.S.P.Q.2d 1329 (Fed. Cir. 2006).

In presenting the reasoning to combine prior art references, the examiner may not resort to broad and conclusory statements; as such statements are not "evidence" of anything. *In re Kotzab*, 217 F.3d 1365, 1370, 55 U.S.P.Q.2d 1313 (Fed. Cir. 2000). This prohibition against conclusory examination is as much rooted in the Administrative Procedure Act, which ensures due process and non-arbitrary decision-making, as it is in § 103. *In re Kahn*, 441 F.3d at 988.

2. The Examiner's Rejection of Independent Claim 9

Independent claim 9 recites using compression and decompression instructions as discussed above regarding independent claim 1. As such, Friederich does not anticipate claim 9 or the claims that depend therefrom.

VIII. Conclusion

The Examiner's § 112 rejections are without merit as all claimed features of the present invention are fully enabled, supported by the specification, and clear in scope to those skilled in the art. Further, the Examiner has failed to establish a *prima facie* case of anticipation or obviousness as the Examiner's combination does not disclose or suggest compression using activation data.

Accordingly, reversal of the Examiner's rejections is proper, and such favorable action is solicited.

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VII. Claims Appendix

1. A navigation device, comprising:

a processor;

a memory in communication with the processor;

a display in communication with the processor;

compression and decompression instructions embedded on the processor;

wherein the device uses the memory in cooperation with the processor and the compression and decompression instructions to compress a plurality of coordinate data into reduced sizes relative to original sizes of the coordinate data and associate at least a portion of activation data with each coordinate data, each coordinate data having three or more dimensions and each portion of the activation data identifying one of the three or more dimensions; and

wherein at least a portion of the coordinate data is dynamically communicated to the display

2. The device of claim 1, further comprising an interface device operable to audibly communicate at least a portion of the coordinate data.

3. The device of claim 1, wherein each dimension includes a coordinate change value relative to a previous coordinate's direction and the coordinate change is identified as a desired size for which to compress each coordinate data.

4-5. (Canceled)

6. The device of claim 1, wherein at least one of the dimensions is associated with attribute data relating to at least one of the other dimensions.

7. The device of claim 1, wherein the device is a handheld portable device.

8. The device of claim 1, wherein the memory is remote from the processor.

9. A navigation system, comprising:

a mass storage device adapted to store navigation data;

a server adapted to communicate with the mass storage;

compression and decompression instructions embedded on a processor of a navigation device; and

the navigation device adapted to communicate with and retrieve navigation data from the server via a communication channel, wherein the navigation device includes ~~a~~ the processor in communication with a memory, wherein the compression and decompression instructions of the processor and memory cooperate to compress at least three dimensional data into reduced sizes relative to original sizes associated with the at least three dimensional data, and wherein the at least three dimensional data is associated with the navigation data and activation data, and wherein each one of the at least three dimensional data is associated with a portion of the activation data.

10. The system of claim 9, wherein the communication channel includes a wireless channel.

11. The system of claim 9, wherein the activation data are configurable to activate or deactivate each dimension within the at least three dimensional data of the navigation data.

12. The system of claim 11, wherein the processor is operable to compress the navigation data for storage within the memory.

13-24. (Canceled).

25. A navigational device, comprising:

compression and decompression instructions embedded in a processor in communication with a memory and a display;

the processor adapted for cooperating with the memory using the compression and decompression instructions to compress navigation data having three or more dimensions wherein the navigation data includes activation data and coordinate data, wherein the activation data includes a plurality of portions and each portion of the activation data maps to one of the three or more dimensions; and

a Global Positioning Satellite (GPS) receiver that cooperates with the processor and provides to the processor specific values for coordinate data, wherein the processor maps the specific values with portions of the compressed navigation data using the activation data and dynamically decompresses those mapped portions and communicates the decompressed mapped portions to the display.

26. The navigational device of claim 25, wherein the navigation device is a portable digital assistant.

27. The navigation device of claim 25, wherein the navigation data includes attribute data within one or more of the three or more dimensions, and wherein the attribute data drives presentation effects of the decompressed mapped portions on the display.

28. The navigation device of claim 25, wherein the navigational device transmits the decompressed mapped portions to an external device.

29. The navigational device of claim 25, wherein each of the three or more dimensions include cartographic data.

30. The navigational device of claim 25, wherein the decompressed match portions represent at least in part a current position of the device within a route that the device is traveling along.

31. The navigational device of claim 25 further comprising an audio device in cooperation with the processor, wherein the audio device communicates at least a part of the decompressed mapped portions audibly.

32. The navigational device of claim 25 wherein at least one of the three or more dimensions associated with the decompressed mapped portions includes landmark data proximate to the navigational device.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.